

AMENDMENTS TO THE CLAIMS

This listing will replace all prior versions, and listings, of claims in the application:

1. (Currently amended) A ~~[[P]]~~ pseudo-isothermal chemical reactor (1), comprising a plurality of boxed, plate-shaped heat exchangers (7) with a substantially flattened rectangular shape, formed from a pair of juxtaposed metallic plates (8, 8a), spaced apart and joined perimetrically, defining an inner chamber (9) intended to be crossed, along a predetermined direction, by a heat exchange operating fluid, ~~characterized in that~~ wherein said heat exchangers (7) comprise spacer elements (12) placed between said metallic plates (8, 8a) inside said chamber (9),

wherein the spacer elements prevent squashing or inward buckling of the pair of juxtaposed metallic plates from pressure exerted on the plates in a direction substantially normal to the predetermined direction to be crossed by the heat exchange operating fluid.

2. (Currently amended) The ~~[[C]]~~ chemical reactor according to claim 1, ~~characterized in that~~ wherein said spacer elements (12) comprise a metallic network, stretched metallic plate, a grill or else a plate with fret or concertina profile with parallel folds.

3. (Currently amended) The ~~[[C]]~~ chemical reactor according to claim 1, ~~characterized in that~~ wherein said spacer elements (12) are structurally independent from said exchangers (7).

4. (Currently amended) The ~~[[C]]~~ chemical reactor according to claim 1, ~~characterized in that~~ wherein said spacer elements (12) are welded to the plates (8, 8a) of said heat exchangers (7) at predetermined welding points (100).

5. (Currently amended) The ~~[[C]]~~ chemical reactor according to claim ~~[[1]]~~ 4, ~~characterized in that~~ wherein said welding points (100) are arranged with a quincunx pattern.

6. (Currently amended) A ~~[[B]]~~boxed, plate-shaped heat exchanger (7) with a substantially flattened rectangular shape, formed from a pair of juxtaposed metallic plates (8, 8a), spaced apart and joined perimetrically, defining an inner chamber (9) intended to be crossed, along a predetermined direction, by a heat exchange operating fluid, ~~characterized in that~~ wherein said heat exchanger (7) comprises a spacer element (12) placed between said metallic plates (8, 8a) inside said chamber (9),

wherein the spacer elements prevent squashing or inward buckling of the pair of juxtaposed metallic plates from pressure exerted on the plates in a direction substantially normal to the predetermined direction to be crossed by the heat exchange operating fluid.

7. (Currently amended) The ~~[[H]]~~heat exchanger (7) according to claim 6, ~~characterized in that~~ wherein said spacer element (12) comprises a metallic network, stretched metallic plate, a grill or else a plate with fret or concertina profile with parallel folds.

8. (Currently amended) The ~~[[H]]~~heat exchanger (7) according to claim 6, ~~characterized in that~~ wherein said spacer element (12) is structurally independent from said heat exchanger (7).

9. (Currently amended) The ~~[[H]]~~heat exchanger (7) according to claim 6, ~~characterized in that~~ wherein said spacer element (12) is welded to the plates (8, 8a) of said heat exchanger (7) at predetermined welding points (100).

10. (Currently amended) The ~~[[H]]~~heat exchanger (7) according to claim 9, ~~characterized in that~~ wherein said welding points (100) are arranged with a quincunx pattern.